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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/502,305

11/15/2004

Philippe Liebaert

15675P539

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7590

08/23/2007

BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
1279 OAKMEAD PARKWAY  
SUNNYVALE, CA 94085-4040

EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT

PAPER NUMBER

1742

MAIL DATE

DELIVERY MODE

08/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/502,305

**Applicant(s)**

LIEBAERT, PHILIPPE

**Examiner**

George P. Wyszomierski

**Art Unit**

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. On page 6 of Applicant's response filed June 12, 2007, Applicant states that he "submitted a preliminary amendment mailed on February 3, 2005 including amended claims 4-8 and 10-12." It is noted that no such amendment is of record in this application. The only amendment that was of record in this application prior to the Office Action of March 29, 2007 was an amendment which added a sentence to the specification making reference to the PCT International Application. In any event, the point is moot because the June 12, 2007 response includes an amended set of claims in proper order.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-13, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boulier (U.S. Patent 4,504,310) in view of Bacos et al. (U.S. Patent 6,695,960).

Boulier discloses a process that includes preparing a metal alloy including chromium and aluminum with Cr and Al oxide inclusions, agglomerating the alloy together with a reducing agent to form balls or pellets, and subjecting these balls or pellets to heating in a vacuum to reduce the inclusions; see columns 5-6 of Boulier. With respect to claims 6, 7, 15, and 16, note Boulier column 7, lines 24-33. With respect to claims 8, 9 and 17, Boulier column 4, line 61 thru column 5, line 34 discloses that the prior art process includes the presently claimed limitations

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regarding an aluminothermic reaction. With regard to claims 10 and 12, note claims 14 and 3, respectively, of the Boulrier reference. With regard to claim 11, the examiner's position is that the location where processing in a vacuum is carried out by Boulrier would meet the definition of a "vacuum oven".

Boulrier does not specifically disclose eliminating a surface layer from the final product (e.g. by abrasion or tribofinishing) as required by the instant claims. However, Boulrier column 7, lines 1-3 states that the materials made in the prior art process are "for use, in particular, in the fabrication of the delicate parts of aeronautical turbo-motors." Clearly, one skilled in the art, intending to produce delicate parts, would be required to perform steps such as surface finishing or machining steps in order to ensure that any such parts are produced within very close tolerances. The recitation in claim 4 and 13 that elimination "is performed by means of a vibrating enclosure" does not patentably distinguish the invention from Boulrier, because this limitation defines an apparatus limitation, which does not define a patentably distinguishable process from that of the prior art. Bacos column 2, lines 29-32 indicates it was known in the art, at the time of the invention, to subject alloy particles containing chromium and aluminum that have been processed in a vacuum to post-operative machining followed by tribofinishing. The Bacos products are also intended for use in turbine blades.

Given that the materials of Boulrier and Bacos are similar to each other and are intended for the same purpose, it would have been considered an obvious expedient by one of skill in the art to incorporate the machining and tribofinishing steps disclosed by Bacos et al. into the process as disclosed by Boulrier.

4. In the June 12, 2007 response, Applicant alleges that the above combination of Boulrier and Bacos would not disclose the invention to one of ordinary skill in the art,

particularly that nothing in the prior art indicates that performing the eliminating step of the invention would result in a material of increased purity as disclosed in the present specification. Applicant's arguments have been carefully considered, but are not persuasive of patentability because nothing recited or implied in any of the instant claims requires the production of a material of any particular purity.

5. Claim 14 is allowable over the prior art of record, and claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose or suggest a process as claimed and which includes a step of eliminating an 0.1-0.5 mm thick surface layer from the granules.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. All patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GPW  
August 20, 2007

  
GEORGE WYSZOMIERSKI  
PRIMARY EXAMINER  
GROUP 1700